UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,784	10/05/2000	Juha Rasanen	PM 273950	4022

909 7590 03/18/2005

PILLSBURY WINTHROP, LLP
P.O. BOX 10500
MCLEAN, VA 22102

EXAMINER	
SCHEIBEL, ROBERT C	

ART UNIT	PAPER NUMBER
2666	

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/647,784	RASANEN, JUHA	
	Examiner	Art Unit	
	Robert C. Scheibel	2666	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on 10/12/04

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12 and 14-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *10 and 27* is/are allowed.

6)☒ Claim(s) *1-9,11-12,14-26,28-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Examiner has fully considered applicant's remarks starting on page 15 of the papers filed 10/12/2004. In the first few paragraphs from page 15-17, applicant summarizes the current status of the claims and summarizes the traversal of the rejections from the last office action. Examiner has responded to the traversal in detail below.

2. Applicant's arguments, see "Deficiencies of Aoki", filed 10/12/2004, with respect to U.S. Patent 5,757,792 to Aoki, et al have been fully considered and are persuasive. The rejection of claims 1, 13, and 19 under 35 U.S.C. 102(e) by Aoki et al has been withdrawn as the amended limitations are not disclosed by Aoki.

3. Applicant's arguments, see "Deficiencies of Roobol", filed 10/12/2004, with respect to U.S. Patent 6,363,058 to Roobol et al have been fully considered but they are not persuasive. Applicant summarizes Roobol and then asserts that Roobol fails to disclose, teach, or suggest the negotiation step of claims 1, 6, 8, 17, and 19. However, it is clear that in a network such as that in Roobol (where the capacity of each logical link varies from subscriber to subscriber) a connection or call cannot be set up without some sort of negotiation between the mobile station and the network about the capacity of the connection or call. In order for communication between the subscriber and the network to succeed, there must be an agreement as to the mapping of logical channels onto physical channels. As specified in lines 8-13 of column 4 of Roobol, this negotiation takes place at bearer setup between the mobile station and the base station. In order to know what physical capacity is required to support the logical channels, this negotiation must involve the capacity required for each connection. Therefore, the previous

rejection of claims 1, 6, 8, 17, 19, 21, and 23 is maintained and has been updated to clarify how this limitation is anticipated.

4. Applicant's arguments, see "Deficiencies of Gorsuch", filed 10/12/2004, with respect to U.S. Patent 6,081,536 to Gorsuch et al have been fully considered but they are not persuasive. In this section, applicant summarizes portions of Gorsuch in the first paragraph. Applicant then argues that the ISDN connection is a single call from the CDMA system point of view. While it may be true that the ISDN connection can be viewed as a single call, it is also true that the voice and data calls performed using the terminal equipment 112-1, 112-2, and 110 are also clearly distinct calls/connections. There is nothing in the broad claim language to distinguish these calls from the calls in claim 1, for instance. Furthermore, it is also clear that these calls occur simultaneously to one another. The distinctions made in the applicants arguments that Gorsuch teaches interfacing the elements 112-x to a single ISDN modem and then to a protocol converter and CDMA transceiver have been considered, but examiner views these as the details of Gorsuch's implementation of the broad method claimed by applicant. Examiner maintains that the present broad claim language does not distinguish applicant's invention from that of Gorsuch. Applicant further asserts that Gorsuch does not disclose, teach or suggest the new limitation of claim 1 of negotiating between the mobile station and the network about the capacity needed for each call or connection. However, examiner disagrees; Gorsuch discloses this limitation in lines 54-60 of column 6.

5. Applicant's arguments, see "Deficiencies of Rotter", filed 10/12/2004, with respect to U.S. Patent 5,901,143 to Rotter et al have been fully considered but they are not persuasive. In the first paragraph of this section, applicant summarizes portions of the Rotter document.

Applicant then argues that Rotter provides only a single call. Applicant specifically asserts in paragraph 3 of this section that the logical connections LC1 and LC2 are not simultaneous calls. However, there is nothing in the word "call" in the claim language (broadly interpreted as a connection) to distinguish it from any other type of logical connection. Applicant appears to concede as much in the claim language of the negotiating step where the words call and connection are used interchangeably. Thus, the logical connections of Rotter do in fact anticipate the present claim language when interpreted as broadly as is reasonable. Applicant further asserts that Rotter fails to disclose, teach, or suggest negotiation between the mobile station and the network about the capacity needed for each call and connection. Examiner disagrees and cites lines 60-67 of column 6 as an example of this teaching.

6. Applicant's arguments, see "Deficiencies of Gorsuch and Tracy", filed 10/12/2004, with respect to U.S. Patent 6,081,536 to Gorsuch and U.S. Patent 6,014,089 to Tracy et al, have been fully considered but they are not persuasive. Applicant refers to the previous arguments regarding the deficiencies of Gorsuch and indicates that Tracy doesn't remedy these deficiencies. However, as stated above, examiner disagrees with the assertion that Gorsuch doesn't disclose the limitations of the independent claims. For these reasons, the previous rejection of claims 11, 12, 28, and 29 under 35 U.S.C. 103(a) with Gorsuch in view of Tracy is maintained in this office action.

7. Applicant's arguments, see "Deficiencies of Gorsuch and Grube", filed 10/12/2004, with respect to U.S. Patent 6,081,536 to Gorsuch and U.S. Patent 5,583,869 to Grube et al, have been fully considered but they are not persuasive. Applicant refers to the previous arguments regarding the deficiencies of Gorsuch and indicates that Grube doesn't remedy these

deficiencies. However, as stated above, examiner disagrees with the assertion that Gorsuch doesn't disclose the limitations of the independent claims. For these reasons, the previous rejection of claims 11, 12, 28, and 29 under 35 U.S.C. 103(a) with Gorsuch in view of Grube is maintained in this office action.

8. Note that claim 30 has been rejected below although allowable subject matter was indicated in the last office action. Applicant indicated that claim 30 was written in independent format and is therefore allowable. However, examiner points out that several limitations from the previously presented claim 30 (which depended upon claim 19, 21, and 22) have been omitted and thus claim 30 in the present amendment is broader than that presented previously. Therefore, the rejection below has been necessitated by amendment.

9. As suggested above, the rejections below have been cleaned up and updated for the following reasons: to address new claims, remove cancelled claims, clarify the rejection, address newly amended limitations, or fix minor informalities from the last office action.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims **1, 6, 8, 17, 19, 21, 23 and 36-37** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,363,058 to Roobol, et al.

Specifically, the two or more simultaneous calls of claims 1, 6, 8, 17, 19, 36, and 37 are anticipated by the service access points 125a, 125b, and 125c of Figure 4 of Roobol. The common traffic channel is anticipated by the communications link 4 of Figure 1 of Roobol. The sharing of capacity is anticipated by the method of mapping logical channels to physical channels shown in Figure 3 of Roobol. The limitation of negotiating between the mobile station and a mobile communication network about the capacity needed for each connection is anticipated by lines 8-13 of column 4 of Roobol. In order for communication between the subscriber and the network to succeed, there must be an agreement as to the mapping of logical channels onto physical channels. As specified in lines 8-13 of column 4 of Roobol, this negotiation takes place at bearer setup between the mobile station and the base station. In order to know what physical capacity is required to support the logical channels, this negotiation must involve the capacity required for each connection. This passage also clearly anticipates the additional limitation of claim 37 of negotiating about the use of the common traffic channel. Further, the limitation of claims 1 and 19 of adjusting dynamically the capacity of the common traffic channel is also anticipated by the passage from lines 8-13 of column 4 of Roobol which discloses reconfiguration when a bearer is setup or released.

The limitation of claims 15 and 21 of separate sub-channels or each call is anticipated by the sub-channels formed by the LLC 30 and RLC 35 blocks of Figures 2 and 4 of Roobol. The user data for each call or service access point is transmitted in the streams created by these layers as described in column 3, lines 32-35 "The RLC protocol 35 provides a stream of specifically classified data which is channel encoded and interleaved via a multiplexer 45 before being mapped onto a logical channel 40." In this case, the stream is in fact sub-channel.

The dedicated radio link protocol or link access control protocol of claims 6, 17, and 23 are also anticipated by the LLC 30 and RLC 35 blocks of Figures 2 and 4 of Roobol. The streams described in column 3, lines 32-35 are also logical channels.

The dedicated radio link protocol or link access control protocol of claim 8 is anticipated by the LLC 30 and RLC 35 blocks of Figures 2 and 4 of Roobol as stated in the preceding paragraph. The further limitation of transmitting packet data encapsulated in a protocol frame is anticipated by figure 5 and in the text from line 65 of column 4 to line 7 of column 5.

12. Claims **1, 2, 3, 14, 15, 19, 20, 24 and 31-37** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,081,536 to Gorsuch et al.

Specifically, the two or more simultaneous calls of claims 1, 2, 14, 19, 20, 31, 33, and 35-37 are anticipated by the calls originating from elements 112-1, 112-2, 112-3, 112-x, and 110 of Figure 1. These calls share the capacity of the traffic channel formed by the link 160-1 or 160-2 of Figure 1. The step and means of these claims of negotiating between the mobile station and a mobile communication network about the capacity needed for each connection is anticipated throughout in that the mobile and the network must negotiate about the rates required by these constituent calls in order to effectively adjust the subchannels used. See lines 54-60 of column 6 for example. This passage also clearly anticipates the additional limitation of claim 37 of negotiating about the use of the common traffic channel. Gorsuch anticipates the limitation of dynamic adjustment of the channel capacity found in these claims in the same passage (lines 54-60 of column 6) as well as throughout the patent. One example is in the abstract of Gorsuch: "Bandwidth is allocated dynamically within a session to specific CDMA subscriber unit based upon data rate determinations". Another example is found in column 2, lines 31-34: "The

instantaneous bandwidth needs of each on-line subscriber unit are met by dynamically allocating multiple subchannels of the RF carrier on an as needed basis for each session".

The limitation of separate subchannels of claim 21 is anticipated by the subchannels of the ISDN connection that are used for each call as shown in figure 1.

The steps and means of claims 3 and 24 are anticipated by parts of figure 5 as detailed below. The step and means of assigning the common traffic channel when the call(s) are first set up are anticipated by state 504 of figure 5. The step and means for increasing or reallocating capacity when a new call is added are anticipated by state 514 of figure 5. The step and means for decreasing capacity when a call is cleared is anticipated by state 522 of figure 5. The step and means for releasing the common traffic channel after the last call is cleared is anticipated by state 512 of figure 5.

The limitations of claims 32 and 34 that at least one of the calls is a packet data call is disclosed in the call initiated by station 110 of Figure 1.

13. Claims **1, 4, 5, 16, 19, 21, 22, 25, 36 and 37** rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 5,901,143 to Rotter, et al.

Specifically, the two or more calls of claims 1, 5, 16, 19, 36, and 37 are anticipated by the logical connections LC1 and LC2 of Rotter. These connections share the capacity of the "broadband link" discussed throughout Rotter. (As an example, see the first sentence of the abstract: "The invention concerns a method of operating a broadband link for the exchange of data (DAT) between a mobile terminal (MS) and a network-side mobile radio facility (MSC)"). Rotter further discloses the limitation of these claims of negotiating between the mobile station and the network about the capacity needed for each call and connection in lines 60-67 of column

6. This passage also clearly anticipates the additional limitation of claim 37 of negotiating about the use of the common traffic channel. This passage as well as the indication that variable bandwidth is used in line 12 on column 7 anticipate the limitation of claims 1, 19, 36, and 37 of dynamically adjusting the capacity of the common traffic channel.

The limitation of claims 4 and 25 regarding the type of the simultaneous calls is anticipated throughout Rotter. Figure 2 is a good example of this as logical channel LC1 is non-transparent and logical channel LC2 is transparent. This is described in more detail from column 6, line 60 through column 7, line 16.

The limitations of claims 5, 16, and 22 are anticipated as demonstrated below. The limitation of establishing one radio link protocol is anticipated by the preferred embodiment of Rotter in which the logical connections discussed above are transmitted using a modified radio link protocol (MRLP). For example, consider lines 11-13 of column 3: "The basic idea of the invention for the data transport is to introduce one or more additional packet types in a protocol which functionally corresponds to the MRLP protocol". The limitation of a logical channel for each connection and transmitting user data via the respective logical channel is anticipated by logical connections LC1 and LC2. Rotter indicates that the user data is transmitted on these connections in lines 62-65 of column 6: "The logic connection LC1 is formed by the exchange of type A useful data packets FRDAT1 and the logical connection LC2 is formed by the exchange of type B useful data packets FRDAT2".

The limitation of separate subchannels of claim 21 is anticipated by the subchannels RC1 through RCN of Rotter.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims **11, 12, 28,** and **29** rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,081,536 to Gorsuch, et al in view of U.S. Patent 6,014,089 to Tracy, et al.

Gorsuch discloses the limitations of claims 1 and 19 as stated in the rejection above. Gorsuch does not disclose the limitations of claims 11 and 28 of using temporarily unused resources for traffic of another connection. Gorsuch also does not disclose the limitations of claims 12 and 29 of detecting and deleting filler, using the capacity for traffic from another connection and then returning the filler at the receiver.

Tracy teaches the limitations of claims 11, 12, 28, and 29. Specifically, the step of monitoring the traffic channel of claims 11 and 28 is taught in lines 62-66 of column 5 of Tracy: "The control channel packet assembler/disassembler 105 continuously monitors the data steams and can separate the control channel transmission packets necessary for system control or other system information from other channel transmission packets with other characteristics". The detecting that there is temporarily no traffic and using the temporarily unused resources of claims 11 and 28 is taught in lines 29-31 of column 6: "the present invention utilizes removal of the "dummy" packets that contain no information and replacing these packets with diverted transmission packets". Identifying the "dummy" packets for removal constitutes detecting that there is no useful traffic for this link and replacing these packets is using the temporarily unused

resources. Further, lines 29-43 of column 6 teach the limitations of claims 12 and 29. The "dummy" packets are the filler in this case and must be detected in order to replace them. This anticipates the step of detecting the filler. Tracy teaches replacing the "dummy" packets, which anticipates the steps of deleting and transmitting in place of the filler. Finally, teaches reinserting the "dummy" packets in lines 38-40 of column 6: "The diverted transmission packets are replaced with "dummy" transmission packets making the operation of this system transparent to the MSC 103".

Gorsuch and Tracy are analogous art because they are from the same field of endeavor of transmitting data in a mobile wireless system.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Gorsuch to make use of unused or filler capacity for the transmission of additional data on the radio channel. The motivation for doing so would have been to take advantage of the under utilized capacity in the radio channel. This is suggested by Tracy in lines 54-59 of column 6: "there are times when the control channel is not in use by the digital GSM, PACS, FDMA, CDMA or TDMA communications network. During this non-use time, the data collection device 101 is capable of transmitting data over the network system without interfering with other control channel transmissions".

Therefore, it would have been obvious to combine Tracy with Gorsuch for the benefit of using under utilized capacity to obtain the invention as specified in claims 11, 12, 28, and 29.

16. Claims **9 and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,081,536 to Gorsuch in view of U.S. Patent 5,583,869 to Grube et al.

Gorsuch discloses the limitations of claims 1 and 19 as stated in the rejection above. Gorsuch does not disclose expressly the limitations of claims 9, 10, 26, and 27 of detecting that more capacity if unavailable, reallocating the existing capacity and allocating the requested capacity at a later time.

Grube discloses the limitations of claims 9 and 26 in Figure 3. Specifically, the limitation of claims 9 and 26 of detecting when the mobile network is unable to allocate more transmission capacity is disclosed in steps 302 and 303. The step of allocating the available capacity to the calls is disclosed in step 306. The limitation of allocating the requested capacity to the common traffic channel later when capacity becomes available is disclosed in lines 55-57 of column 5 which indicates that this flow (in figure 3) will be run at a later point in time and that if additional capacity is available at that time, it will be allocated at that (later) point in time in step 307.

Gorsuch and Grube are analogous art because they are from the same field of endeavor of sharing limited communication capacity in a wireless system.

At the time of the invention, it would have been obvious to a person skilled in the art to use the concept of reallocating channel capacity when no additional capacity is available to modify Gorsuch to obtain the invention as specified in claims 9 and 26.

The motivation for doing so would have been to allow wireless systems to dynamically allocate resources on an as needed basis to efficiently handle changing service requirements as suggested by Grube in lines 26-32 of column 2.

Therefore, it would have been obvious to combine Grube with Gorsuch for the benefit of dynamically allocating system resources to obtain the invention as specified in claims 9 and 26.

17. Claims **7, 18 and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,901,143 to Rotter, et al in view of U.S. Patent 5,638,371 to Raychaudhuri et al.

Rotter discloses the limitation of claims 7, 18, and 30 of using one traffic channel for two or more calls by the logical connections LC1 and LC2. These connections share the capacity of the "broadband link" discussed throughout Rotter. (As an example, see the first sentence of the abstract: "The invention concerns a method of operating a broadband link for the exchange of data (DAT) between a mobile terminal (MS) and a network-side mobile radio facility (MSC)"). Rotter further discloses the limitation of these claims of negotiating with a network about the capacity needed for each call and connection in lines 60-67 of column 6. This passage also clearly anticipates the additional limitation of claim 37 of negotiating about the use of the common traffic channel. The limitation of establishing one radio link protocol is anticipated by the preferred embodiment of Rotter in which the logical connections discussed above are transmitted using a modified radio link protocol (MRLP). For example, consider lines 11-13 of column 3: "The basic idea of the invention for the data transport is to introduce one or more additional packet types in a protocol which functionally corresponds to the MRLP protocol". The limitation of a logical channel for each connection and transmitting user data via the respective logical channel is anticipated by logical connections LC1 and LC2. Rotter indicates that the user data is transmitted on these connections in lines 62-65 of column 6: "The logic connection LC1 is formed by the exchange of type A useful data packets FRDAT1 and the logical connection LC2 is formed by the exchange of type B useful data packets FRDAT2".

Rotter does not disclose expressly the limitation of transmitting data packets of a packet-switched call interleaved with the protocol frames of the radio link protocol or link access protocol or encapsulated in the protocol frames.

Raychaudhuri discloses the limitation of transmitting data packets of a packet-switched call interleaved with the protocol frames of the radio link protocol throughout. Consider Figures 9 and 10 which illustrate the queuing mechanism used for the various traffic types. It is clear that the ABR traffic (which has lower priority than the CBR/VBR traffic) will be essentially squeezed in between the higher priority data based on available capacity. Rotter and Raychaudhuri are analogous art because they are from the same field of endeavor of wireless data communications. At the time of the invention it would have been obvious to a person of ordinary skill in the art to modify Rotter to use any additional capacity for best effort or packet data traffic. The motivation for doing so would have been to efficiently multiplex traffic from bursty data sources as suggested by Raychaudhuri in lines 4-5 of column 3. Therefore, it would have been obvious to combine Raychaudhuri with Rotter for the benefit of efficiently multiplexing bursty data to obtain the invention as specified in claims 7, 18 and 30.

Allowable Subject Matter

18. Claims **10 and 27** are allowed. These claims were objected to in the previous rejection as being dependent upon a rejected claim and have been re-written in independent form to overcome that objection.

Conclusion

19. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent 6,144,647 discloses a method for establishing multi-dialogue communications between subscriber stations; the dialogues of this invention read on the multiple simultaneous calls of the present application. U.S. Patent 5,590,406 and U.S. Patent Application Publication 2002/0071409 both disclose different methods of using one channel to handle multiple calls.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert C. Scheibel whose telephone number is 571-272-3169. The examiner can normally be reached on Monday and Thursday from 6:30-5:00 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema S. Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RCS 3-12-05

Robert C. Scheibel
Examiner
Art Unit 2666

Seema S. Rao 3/16/05

SEEMA S. RAO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600